



US 20020107968A1

(19) **United States**(12) **Patent Application Publication** (10) **Pub. No.: US 2002/0107968 A1**  
Horn et al. (43) **Pub. Date: Aug. 8, 2002**(54) **METHODS AND APPARATUS FOR SCHEDULING, SERVING, RECEIVING MEDIA-ON-DEMAND FOR CLIENTS, SERVERS ARRANGED ACCORDING TO CONSTRAINTS ON RESOURCES****Related U.S. Application Data**

(60) Provisional application No. 60/254,514, filed on Dec. 8, 2000.

**Publication Classification**(51) **Int. Cl.<sup>7</sup>** ..... **G06F 15/16**  
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**SAN FRANCISCO, CA 94111-3834 (US)**(21) Appl. No.: **09/768,843**(22) Filed: **Jan. 23, 2001****(57) ABSTRACT**

A media object is scheduled for transmission between a server and a client. The media object is partitioned into segments of blocks, wherein each block is a unit of media for which a client will wait to receive an entire block before playing out the block, and wherein each segment includes an integer number of blocks. One or more channels on which to serve each segment are determined, and a rate at which to serve each segment is determined. Additionally, a schedule pair for each channel is determined. The schedule pair includes a time at which the client may start receiving on the channel and a time at which the client may stop receiving on the channel.

